UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,829	05/09/2002	Yongwon Choi	600-1-200NCIP2	6562

23565 7590 06/21/2004

KLAUBER & JACKSON
411 HACKENSACK AVENUE
HACKENSACK, NJ 07601

EXAMINER	
ANDRES, JANET L	

ART UNIT	PAPER NUMBER
1646	

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/873,829	CHOI ET AL.	
	Examiner	Art Unit	
	Janet L. Andres	1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-86* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-86* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-8, 16-24, and 25, 27, and 37 in part, drawn to polynucleotides and means of expression, classified in class 435, subclasses 69.1, 320.1, and 325, and class 536, subclass 23.5.

II. Claims 9, 25 in part, 26, and 28, drawn to polypeptides, classified in class 530, subclass 350.

III. Claims 10-15, and 25, 27, and 37 in part, drawn to antibodies, classified in class 530, subclass 387.1.

IV. Claims 29-36 and 56-86, drawn to methods of treatment with agonists, classified in class 514, subclass 2.

V. Claims 38-40 in part, drawn to methods of treatment with antagonistic antibodies, classified in class 424, subclass 158.1.

VI. Claims 38-40 in part, drawn to method of treatment with antisense, classified in class 514, subclass 44.

VII. Claims 41 and 42, drawn to gene therapy, classified in class 435, subclass 455.

VIII. Claims 43-51, drawn to methods of diagnosis, classified in class 435, subclasses 6 and 7.1.

IX. Claims 52-55, drawn to methods of modulating antigen response, classified in class 424, subclass 184.1.

Claims appear in more than one group if they encompass more than one invention. It is noted that there are two claims 54; the second is referred to as claim 55 above but correction is required.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions differ structurally and functionally and cannot be used together or interchangeably.

Inventions I and III are also unrelated. They differ structurally and functionally and cannot be used together or interchangeably.

Inventions I and IV are not related. The polynucleotides cannot be used in the methods.

Inventions I and V are not related. The polynucleotides cannot be used in the methods.

Inventions I and VI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the polynucleotides have other uses, such as generation of protein and hybridization assays, and the methods can be performed with other agents, such as antibodies.

Inventions I and VII are related as product and process of use. They are distinct because the polynucleotides have other uses, such as hybridization assays.

Inventions I and VIII are related as product and process of use. They are distinct because the polynucleotides have other uses, such as generation of protein.

Inventions I and IX are not related. The polynucleotides cannot be used in the methods.

Inventions II and III are not related. They differ structurally and functionally and cannot be used together or interchangeably.

Inventions II and IV are related as product and process of use. They are distinct because the proteins have other uses, such as the generation of antibodies.

Inventions II and V are not related. The polypeptides cannot be used in the methods.

Inventions II and VI are not related. The polypeptides cannot be used in the methods.

Inventions II and VII are not related. The polypeptides cannot be used in the methods.

Inventions II and VIII are distinct because the polypeptides can be detected in other ways, such as by activity assays.

Inventions II and IX are distinct because the methods can be practiced with other modulators and the polypeptides have other uses, such as the generation of antibodies.

Inventions III and IV are not related. The antibodies cannot be used in the methods.

Inventions III and V are related as product and process of use. They are distinct because the antibodies have other uses, such as protein purification.

Inventions III and VI are not related. The antibodies cannot be used in the methods.

Inventions III and VII are not related. The antibodies cannot be used in the methods.

Inventions III and VIII are not related. The antibodies cannot be used in the methods.

Inventions III and IX are not related. The antibodies cannot be used in the methods.

Inventions IV and V are distinct because they require different reagents and different method steps.

Inventions IV and VI are not related. They have different method steps, require different reagents, and have different goals and outcome measures.

Inventions IV and VII are not related. They have different method steps, require different reagents, and have different goals and outcome measures.

Inventions IV and VIII are not related. They have different method steps, require different reagents, and have different goals and outcome measures.

Inventions IV and IX are not related. They have different method steps, require different reagents, and have different goals and outcome measures.

Inventions V and VI are not related. They have different method steps, require different reagents, and have different goals and outcome measures.

Inventions V and VII are not related. They have different method steps, require different reagents, and have different goals and outcome measures.

Inventions V and VIII are not related. They have different method steps, different goals, and different outcome measures.

Inventions V and IX are not related. They have different method steps, different goals and different outcome measures.

Inventions VI and VII are not related. They have different method steps, require different reagents, and have different goals and outcome measures.

Inventions VI and VIII are not related. They have different method steps, require different reagents, and have different goals and outcome measures.

Inventions VI and IX are not related. They have different method steps, require different reagents, and have different goals and outcome measures.

Inventions VII and VIII are not related. They have different method steps, different goals and different outcome measures.

Inventions VII and IX are not related. They have different method steps, different goals and different outcome measures.

Inventions VIII and IX are not related. They have different method steps, different goals and different outcome measures.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the searches required the different groups are different, restriction for examination purposes as indicated is proper.

> The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.
>
> In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR

> 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai, In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.**
>
> Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet L. Andres whose telephone number is 571-272-0867. The examiner can normally be reached on Monday-Thursday and every other Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on 571-272-0887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Janet L. Andres, Ph.D.
Primary Examiner

16 June 2004